"The changes in the olive were numerous. In two cases the ganglion cells were atrophied, on both sides in one case, and very extensively, so that very little of the olive remained; in another, the cells of the olive on the atrophic side were remarkably smaller than on the sound side. In the other cases, also a cell atrophy could be unequivocally demonstrated."

In four cases there was atrophy of the tract, which the author described, although ignorant of the description of Flechsig and Bechterew of the same tract connecting the large olive with the cerebrum (nucleus lentiformis), and which they called the central tegmental tract (*centrale Haubenbahn*).

In one of the cases the connecting tract between the olive and the cerebellum, by way of the raphe and the restiform body of the opposite side, was atrophic.

The hemispheres of the cerebellum were plainly atrophic in four cases. The dentated body of one side was larger than that of the other. In all five cases the tegmenti-brachium was atrophic, as well as the red nucleus of the tegmentum.

The thalamus was also involved, and there was also a diminution in volume of the body of Luys and the body of the substantia nigra.

"Although the cerebral atrophy existed for years and a secondary atrophy of the pyramid tract resulted thereby, the primary nuclei in the medulla and the anterior cornua of the spinal cord remained intact."

The author then considers the question whether there is not an anatomical basis to account for the fact that some of these tracts follow the law of degeneration of Waller, while other tracts do not, and refers to the well-known investigations of Golgi on the structure of the nerve cells and their connections with nerve fibres, and to the similar investigations of Forel, as an explanation. N. E. B.

NUCLEAR ORIGIN OF THE OCULAR FACIAL.—Mendel, Berlin Medical Society, Nov. 9th, 1887.

Investigations on rabbits and guinea-pigs resulted in the discovery that the upper facial branch takes its origin in the

posterior oculi-motor nucleus. In reference to this relation in man, there are not sufficient anatomical and pathological data to establish it.

The way the upper branch reaches the peripheral facial from the oculi-motor nucleus is through the posterior longitudinal fasciculus and the facial genu. Analagous relations in the division and origin of nerves exist in the spinal cord, and the orbicularis palpebrarum and the levator palpebræ superior are functionally combined. N. E. B.

PHYSIOLOGY OF THE NERVOUS SYSTEM.

ANÆSTHETICS AS A FACTOR IN INSANITY.

Any cause giving rise to delirium may set up a more chronic form of mental disorder quite apart from any febrile disturbance. (*a*) The most common form in such cases is of the type of acute delirious mania; (*b*) though such mental disorder is usually temporary in character, it may pass into chronic weak-mindedness, or into (*c*) progressive dementia which cannot be distinguished from general paresis of the insane.

Alcohol is the most common example of a cause producing permanent disorder of the mind. Symptoms of mental disorder may follow delirium tremens, but instead of the delirious stage disappearing, it becomes established more firmly. A young man of poor nerve inheritance took, within a few days, a large amount of spirit to tide him over some business worry. The symptoms that made the illness appear to be delirium tremens passed off, and left the maniacal excitement persistent. Exhaustion and mental exhaustion followed, with ultimate recovery. Delirium accompanying fevers may have similar results. A seventeen-year-old girl, of neuropathic antecedents, bright, intelligent, and active, became very delirious during the early stages of scarlet fever, and, after several days of sleepless delirium, passed into a condition of mania, at once alarming and revolting. In an asylum she slowly recovered, and has